COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0092274
Effective Date: August 22, 2008
Expiration Date: August 21, 2013

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit as set forth herein.

Owner: Dinwiddie County Water Authority
Facility Name: Rohoic Creek WWTP
County: Dinwiddie
Facility Location: Intersection of Rawlings Road and Cox Road

The owner is authorized to discharge to the following receiving stream:

Stream: Hatcher Run
River Basin: Chowan and Dismal Swamp Basin
River Subbasin: Chowan
Section: 2b
Class: III
Special Standards: None

Deputy Regional Director, Piedmont Regional Office

August 22, 2008
Date

A. Limitations and Monitoring Requirements

1. Upon the issuance of the Certificate to Operate and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall number **001**.

   a. Upon issuance of a certificate to operate, such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS						MONITORING REQUIREMENTS	
	MONTHLY AVERAGE		WEEKLY AVERAGE		MIN	MAX	FREQUENCY	SAMPLE TYPE
Flow (MGD)[1]	NL		NA		NA	NL	Continuous	Totalizing, Indicating, and Recording
pH (standard units)	NA		NA		6.0	9.0	1/Day	Grab
E. coli (Geometric Mean) (N/100 mL)	126		NA		NA	NA	1/Day Between 10 a.m. and 4 p.m.	Grab
Total Suspended Solids (TSS)	30 mg/L [2]	450 kg/d [2]	45 mg/L	680 kg/d [2]	NA	NA	1/Month	24 hour composite
$cBOD_5$	9.0 mg/L[2]	140 kg/d [2]	14 mg/L	210 kg/d [2]	NA	NA	1/Day	24 hour composite
Total Kjehldahl Nitrogen (as N)	3.0 mg/L	45 kg/d	4.5 mg/L	68 kg/d	NA	NA	1/Day	24 hour composite
Dissolved Oxygen	NA		NA		5.0 mg/L	NA	1/Day	Grab
Whole Effluent Toxicity (WET) Test: NOAEC *Ceriodaphnia dubia*[3]	NA		NA		NL	NA	1/Quarter	24 hour composite
Whole Effluent Toxicity (WET) Test: NOAEC *Pimephales promelas*[3]	NA		NA		NL	NA	1/Quarter	24 hour composite
Whole Effluent Toxicity (WET) Test: NOEC *Ceriodaphnia dubia*[3]	NA		NA		NA	NL	1/Quarter	24 hour composite
Whole Effluent Toxicity (WET) Test: NOEC *Pimephales promelas*[3]	NA		NA		NA	NL	1/Quarter	24 hour composite

"NL" means no limitation is established. Monitoring and reporting however are required.
"NA" means not applicable.

(1) The design flow of this treatment facility is **4.0** MGD. See Part I.C.1 for additional flow requirements.
(2) The limitations are expressed in two significant digits.
(3) See Part I. D for WET test requirements and monitoring schedule.

b. There shall be no discharge of floating solids or visible foam in other than trace amounts.

c. At least 85% removal for TSS must be attained for this effluent.

d. Effluent samples shall be taken at Outfall 001.

e. Monitoring and reporting are not required until commencement of this discharge. See Part I.C.12 for notification requirement.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Municipal Major 08/21/2008

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Rohoic Creek Wastewater Treatment Plant
ADDRESS 23008 Airport Dr
Petersburg VA 23803
FACILITY LOCATION South of West Washington Street (US Route 1) 0.5 mile east of intersection with State Route 226

VA0092274	001
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

	YEAR	MO	DAY		YEAR	MO	DAY
FROM				TO			

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)
Piedmont Regional Office
4949-A Cox Road
Glen Allen VA 23060

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
001 FLOW	REPORTD				*********	*********	*********				
	REQRMNT	********	********	MGD	*********	*********	*********			CONT	TIRE
002 PH	REPORTD	*********	*********			*********					
	REQRMNT	*********	*********		6.0	*********	9.0	SU		1/DAY	GRAB
004 TSS	REPORTD				*********						
	REQRMNT	450	680	KG/D	*********	30	45	MG/L		1/M	24HC
007 DO	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		5.0	*********	*********	MG/L		1/DAY	GRAB
068 TKN (N-KJEL)	REPORTD				*********						
	REQRMNT	45	68	KG/D	*********	3.0	4.5	MG/L		1/DAY	24HC
120 E.COLI	REPORTD	*********	*********		*********		*********				
	REQRMNT	*********	*********		*********	126	*********	N/CML		1/DAY	GRAB
159 CBOD5	REPORTD				*********						
	REQRMNT	140	210	KG/D	*********	9.0	14	MG/L		1/DAY	24HC
704 NOAEC - ACUTE 48 HR STAT CERIODAPHNIA DUBIA	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		NL	*********	*********	%		1/3M	24HC

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. SEE 18 U.S.C. & 1001 AND 33 U.S.C. & 1319. (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Municipal Major 08/21/2008

PERMITTEE NAME/ADDRESS(INCLUDE FACILITY NAME/LOCATION IF DIFFERENT)

NAME Rohoic Creek Wastewater Treatment Plant
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PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX.	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
705 NOAEC - ACUTE 48 HR STAT PIMEPHALES PROMELAS	REPORTD	*********	*********			*********	*********				
	REQRMNT	*********	*********		NL	*********	*********	%		1/3M	24HC
721 TUc - CHRONIC 7-DAY STATRE PIMEPHALES PROMELA	REPORTD	*********	*********		*********	*********					
	REQRMNT	*********	*********		*********	*********	NL	TU-C		1/3M	24HC
722 TUc - CHRONIC 3-BROOD STATRE CERIODAPHNIA DUBIA	REPORTD	*********	*********		*********	*********					
	REQRMNT	*********	*********		*********	*********	NL	TU-C		1/3M	24HC
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	
	REPORTD										
	REQRMNT									*******	

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND OVERFLOWS	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS. SEE 18 U.S.C. & 1001 AND 33 U.S.C. & 1319. (Penalties under these statutes may include fines up to $10,000 and/or maximum imprisonment of between 6 months and 5 years.)

OPERATOR IN RESPONSIBLE CHARGE			DATE		
TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE			
TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY

THIS REPORT IS REQUIRED BY LAW (33 U. S. C. § 1318 40 CFR 122.41(l)(4)(i)). FAILURE TO REPORT OR FAILURE TO REPORT TRUTHFULLY CAN RESULT IN CIVIL PENALTIES NOT TO EXCEED $10,000 PER DAY OF VIOLATION: OR IN CRIMINAL PENALTIES NOT TO EXCEED $25,000 PER DAY OF VIOLATION OR BY IMPRISONMENT FOR NOT MORE THAN FIVE YEARS, OR BOTH.

GENERAL INSTRUCTIONS

1. Complete this form in permanent ink or indelible pencil.
2. Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period".
3. For those parameters where the "permit requirement" spaces are blank or a limitation appears, provide data in the "reported" spaces in accordance with your permit.
4. Enter the average and, if appropriate, maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading". KG/DAY = Concentration(mg/l) x Flow(MGD) x 3.785.
5. Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration".
6. Enter the number of samples which do not comply with the maximum and /or minimum permit requirements in the "reported" space in the column marked "No. Ex.".
7. Enter the actual frequency of analysis for each parameter (number of times per day, week, month) in the "reported" space in the column marked "Frequency of Analysis".
8. Enter the actual type of sample collected for each parameter in the "reported" space in the column marked "Sample Type".
9. Enter additional required data or comments in the space marked "additional permit requirements or comments".
10. Record the number of bypasses during the month, the total flow in million gallons and BOD5 in kilograms in the proper columns in the section marked "Bypasses and Overflows".
11. The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator, the operator's certificate number should be reported in the space provided.
12. The principal executive officer should then review the form and sign in the space provided and provide a telephone number where he/she can be reached.
13. You are required to sample at the frequency and type indicated in your permit.
14. Send the completed form to your Dept. of Environmental Quality Regional Office by the 10th of each month.
15. You are required to retain a copy of the report for your records.
16. Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each violation by date.
17. If you have any questions, contact the Dept. of Environmental Quality Regional Office.

B. Alternative Disinfection - Total Residual Chlorine (TRC) Effluent Limitations and Monitoring Requirements

If chlorination is chosen as a disinfection method, TRC [DMR #005] shall be limited and monitored by the permittee as specified below:

1. Effluent TRC shall be monitored, following dechlorination, once per day by grab sample and limited as specified below:

	Monthly Average	Weekly Average
TRC (mg/L)	0.0080	0.0096

2. TRC shall be monitored at the outlet of each operating chlorine contact tank, prior to dechlorination, once every two hours by grab sample.

   a. No more than 36 of all samples taken at the outlet of the chlorine tank shall be less than 1.0 mg/L for any one calendar month. [DMR #157]

   b. No TRC sample collected at the outlet of the chlorine contact tank, prior to dechlorination, shall be less than 0.60 mg/l. [DMR #213]

C. Other Requirements and Special Conditions

1. **95% Capacity Reopener** A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to Piedmont Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Piedmont Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. **Indirect Dischargers** The permittee shall provide adequate notice to the Department of the following:

   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of the Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

   Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. **CTC, CTO Requirement** The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC 25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ prior to

constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

4. **Operation and Maintenance Manual Requirement** The permittee shall develop an Operations and Maintenance (O & M) Manual for the treatment works. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. The manual shall be submitted to the DEQ Regional Office for approval within 90 days of completion of construction. The permittee shall operate the treatment works in accordance with the approved O & M Manual. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

   a. Techniques to be employed in the collection, preservation and analysis of effluent samples (and sludge samples if sludge analyses are required);

   b. Discussion of Best Management Practices, if applicable;

   c. Treatment works design, treatment works operation, routine preventive maintenance of units within the treatment works, critical spare parts inventory and record keeping;

   d. A plan for the management and/or disposal of waste solids and residues;

   e. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.C.5. below that will prevent these materials from reaching state waters; and

   f. Procedures for measuring and recording the duration and volume of treated wastewater discharged.

   Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O & M Manual shall be deemed a violation of the permit.

5. **Materials Handling/Storage** - Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

6. **Licensed Operator Requirement** The permittee shall employ or contract at least one Class II licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

7. **Reliability Class** The permitted treatment works shall meet Reliability Class II.

8. **Sludge Reopener** The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under

Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

9. **TMDL Reopener** This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

10. **Water Quality Criteria Monitoring** The permittee shall monitor the effluent at outfall 001 for the substances noted in the following documents according to the indicated analysis number, quantification level, sample type and frequency:

    a. Attachment A, Water Quality Criteria Monitoring

    b. Form 2A, Part B.6, Effluent Testing Data

    c. Form 2A, Part D, Expanded Effluent Testing Data

    Monitoring results shall be submitted within 180 days after the commencement of discharge. Monitoring and analysis shall be conducted in accordance with 40 CFR Part 136 or alternative EPA approved methods. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures. The DEQ will use these data for making specific permit decisions in the future. This permit may be modified or, alternatively, revoked and reissued to incorporate limits for any of the substances listed in Attachment A, Form 2A Part B.6, or D.

11. **Compliance Reporting**

    a. The maximum quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
$cBOD_5$	5 mg/l
TSS	1.0 mg/l
TKN	0.50 mg/l

    b. Reporting:

    Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is "<QL", then report "<QL" for the quantity. Otherwise use the concentration data and flow data for each sample day to determine the daily quantity and report the average of the calculated daily quantities.

    Weekly Average -- Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated

as zero. All concentration data equal to or above the QL listed in a. above shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the calculated concentration is "<QL", then report "<QL" for the quantity. Otherwise use the concentration data and flow data for each sample day to determine the daily quantity and report the average of the calculated daily quantities.

c. Any single datum required shall be reported as "<QL" if it is less than the QL in a. above. Otherwise the numerical value shall be reported.

d. **Significant Digits --** The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

12. **Notification of Commencement of Discharge** No later than ten days prior to commencement of the discharge from the facility, the permittee shall submit written notification to the Piedmont Regional Office which provides the first day of discharge.

13. **Sludge Use and Disposal** The Sludge Management Plan (SMP) is conditionally approved with the issuance of this permit, provided that a complete SMP is submitted and approved prior to implementation of the specific sludge use or disposal practices. Upon approval, the SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by the chosen sewage sludge use or disposal practices.

14. **Industrial Pretreatment Program/Significant Discharger Survey**

a. Within 180 days of commencing discharge, the permittee shall submit to the DEQ Regional Office a survey of all Industrial Users discharging to the POTW. The information shall be submitted on the DEQ Discharger Survey Form, or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of significant industrial users of the POTW.

b. If Categorical Industrial User(s) are identified, or if the permittee or DEQ determines that the industrial user(s) have potential to adversely affect the operation of the POTW or cause violation(s) of federal, state or local standards or requirements, the permittee shall develop and submit to the DEQ Regional Office, within one year of written notification by DEQ, a pretreatment program for approval. The program shall enable the permittee to control by permit the Significant Industrial Users* discharging wastewater to the treatment works.

c. Should evaluation by the DEQ of results of the Industrial User survey conducted in accordance with (a) above indicate that the permittee is not required to implement a pretreatment program, the requirements for program development described in (d) below may be suspended by the DEQ.

d. The approvable pretreatment program submission shall at a minimum contain the following parts:

(1) Legal authority,

(2) Program procedures,

(3) Funding and resources,

(4) Local limits evaluation, and local limits if needed,

(5) Enforcement response plan, and

(6) List of Significant Industrial Users.

e. Where the permittee is required to develop a pretreatment program, they shall submit to the DEQ Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31 of each year and shall include:

(1) An updated list of the Significant Industrial Users* showing the categorical standards and local limits applicable to each.

(2) A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.

(3) A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.

(4) All information concerning any interference, upset, VPDES permit or Water Quality standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.

(5) A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.

(6) A summary of any changes to the submitted pretreatment program that have not been previously reported to the DEQ Regional Office.

(7) A summary of the permits issued to Significant Industrial Users since the last annual report.

(8) POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.

(9) Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.

(10) Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31 of each year.

(11) Signature of an authorized representative.

f. The DEQ may require the POTW to institute changes to the legal authority regarding Significant Industrial User permit(s):

(1) If the legal authority does not meet the requirements of the Clean Water Act, Water Control Law or State regulations;

(2) If problems such as interferences, pass-through, violations of water quality standards or sludge contamination develop or continue; and

(3) If federal, state or local requirements change.

g. *A significant industrial user is one that:

(1) Has a process wastewater (**) flow of 25,000 gallons or more per average workday;

(2) Contributes a process wastestream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW;

(3) Is subject to the categorical pretreatment standards; or

(4) Has significant impact, either singularly or in combination with other Significant Dischargers, on the treatment works or the quality of its effluent.

**Excludes sanitary, non-contact cooling water and boiler blowdown.

D. Whole Effluent Toxicity Testing

1. Biological Monitoring

a. In accordance with the schedule in Part 1.D.2. below and commencing within six months of the issuance of the CTO , the permittee shall conduct quarterly acute and chronic toxicity tests for a period of three years or until expiration of this permit, whichever occurs first, using 24-hour flow-proportioned composite samples of final effluent from outfall 001. The acute multi-dilution NOAEC tests shall be:

48-hour static tests using *Ceriodaphnia dubia*
48-hour static tests using *Pimephales promelas*

b. These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically with a minimum of 4 replicates, with 5 organisms in each, for calculation of a valid NOAEC (No Observed Adverse Effect Concentration). The NOAEC, as determined by hypothesis testing, shall be reported on the DMR. The LC_{50} should also be determined and noted on the submitted report. Tests in which control survival is less than 90% are not acceptable.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using *Ceriodaphnia dubia*
Chronic 7-Day Static Renewal Survival and Growth Test using *Pimephales promelas*

c. These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable, and a retest will have to be performed within the compliance period. Express the test NOEC as TU_c (Chronic Toxic Units), by dividing 100/NOEC for reporting. Report the LC_{50} at 48 hours and the IC_{25} with the NOECs in the test report.

The permittee may provide additional samples to address data variability during the period of initial data generation. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

d. The test dilutions should be able to determine compliance with the following endpoints:
   (1) Acute (NOAEC) = 100%
   (2) Chronic (NOEC) $\geq$ 69% equivalent to a $TU_c \leq 1.44$.

e. The test data will be evaluated by for reasonable potential at the conclusion of the test period. The data may be evaluated sooner if requested by the permittee, or if toxicity has been noted. Should evaluation of the data indicate that a limit is needed a WET limit and compliance schedule will be required and the toxicity tests of 1.a., b., and c. above may be discontinued.

f. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to

specific parameters. The pollutant specific limits must control the toxicity of the effluent.

g. If after evaluating the data, it is determined that no limit is needed, the permittee shall continue acute and chronic toxicity testing (both species) of the outfall annually, as on the reporting schedule in Part I.D.2.

2. **Reporting Schedule:**

The permittee shall report the results of the WET test on the DMR and submit 2 copies of the toxicity tests reports specified in this Toxics Management Program in accordance with the following schedule:

a. Submit WET test results on the DMR quarterly beginning within 6 months of commencing discharge and continuing for at least 12 quarters (3 years) or until expiration of this permit, whichever occurs first.

b. Submit WET test results on the DMR annually until expiration of this permit after 12 quarters of monitoring if no limit is needed in accordance with Part I.D.1.g, above.

ATTACHMENT A
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CRITERIA MONITORING

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
METALS						
7440-36-0	Antimony, dissolved	(3)	4400		G or C	1/5 YR
7440-38-2	Arsenic, dissolved	(3)	90		G or C	1/5 YR
7440-43-9	Cadmium, dissolved	(3)	0.30		G or C	1/5 YR
16065-83-1	Chromium III, dissolved [8]	(3)	14		G or C	1/5 YR
18540-29-9	Chromium VI, dissolved [8]	(3)	6.4		G or C	1/5 YR
7440-50-8	Copper, dissolved	(3)	1.5		G or C	1/5 YR
7439-92-1	Lead, dissolved	(3)	1.4		G or C	1/5 YR
7439-97-6	Mercury, dissolved	(3)	1.0		G or C	1/5 YR
7440-02-0	Nickel, dissolved	(3)	3.8		G or C	1/5 YR
7782-49-2	Selenium, dissolved	(3)	3.0		G or C	1/5 YR
7440-22-4	Silver, dissolved	(3)	0.20		G or C	1/5 YR
7440-28-0	Thallium, dissolved	(4)	(5)		G or C	1/5 YR
7440-66-6	Zinc, dissolved	(3)	15		G or C	1/5 YR
PESTICIDES/PCB'S						
309-00-2	Aldrin	608	0.05		G or SC	1/5 YR
57-74-9	Chlordane	608	0.2		G or SC	1/5 YR
2921-88-2	Chlorpyrifos (synonym = Dursban)	622	(5)		G or SC	1/5 YR
72-54-8	DDD	608	0.1		G or SC	1/5 YR
72-55-9	DDE	608	0.1		G or SC	1/5 YR
50-29-3	DDT	608	0.1		G or SC	1/5 YR
8065-48-3	Demeton	(4)	(5)		G or SC	1/5 YR
60-57-1	Dieldrin	608	0.1		G or SC	1/5 YR
959-98-8	Alpha-Endosulfan	608	0.1		G or SC	1/5 YR
33213-65-9	Beta-Endosulfan	608	0.1		G or SC	1/5 YR
1031-07-8	Endosulfan Sulfate	608	0.1		G or SC	1/5 YR
72-20-8	Endrin	608	0.1		G or SC	1/5 YR
7421-93-4	Endrin Aldehyde	(4)	(5)		G or SC	1/5 YR
86-50-0	Guthion	622	(5)		G or SC	1/5 YR
76-44-8	Heptachlor	608	0.05		G or SC	1/5 YR

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
1024-57-3	Heptachlor Epoxide	(4)	(5)		G or SC	1/5 YR
319-84-6	Hexachlorocyclohexane Alpha-BHC	608	(5)		G or SC	1/5 YR
319-85-7	Hexachlorocyclohexane Beta-BHC	608	(5)		G or SC	1/5 YR
58-89-9	Hexachlorocyclohexane Gamma-BHC or Lindane	608	(5)		G or SC	1/5 YR
143-50-0	Kepone	(9)	(5)		G or SC	1/5 YR
121-75-5	Malathion	(4)	(5)		G or SC	1/5 YR
72-43-5	Methoxychlor	(4)	(5)		G or SC	1/5 YR
2385-85-5	Mirex	(4)	(5)		G or SC	1/5 YR
56-38-2	Parathion	(4)	(5)		G or SC	1/5 YR
11096-82-5	PCB 1260	608	1.0		G or SC	1/5 YR
11097-69-1	PCB 1254	608	1.0		G or SC	1/5 YR
12672-29-6	PCB 1248	608	1.0		G or SC	1/5 YR
53469-21-9	PCB 1242	608	1.0		G or SC	1/5 YR
11141-16-5	PCB 1232	608	1.0		G or SC	1/5 YR
11104-28-2	PCB 1221	608	1.0		G or SC	1/5 YR
12674-11-2	PCB 1016	608	1.0		G or SC	1/5 YR
1336-36-3	PCB Total	608	7.0		G or SC	1/5 YR
8001-35-2	Toxaphene	608	5.0		G or SC	1/5 YR
	BASE NEUTRAL EXTRACTABLES					
83-32-9	Acenaphthene	625	10.0		G or SC	1/5 YR
120-12-7	Anthracene	625	10.0		G or SC	1/5 YR
92-87-5	Benzidine	(4)	(5)		G or SC	1/5 YR
56-55-3	Benzo (a) anthracene	625	10.0		G or SC	1/5 YR
205-99-2	Benzo (b) fluoranthene	625	10.0		G or SC	1/5 YR
207-08-9	Benzo (k) fluoranthene	625	10.0		G or SC	1/5 YR
50-32-8	Benzo (a) pyrene	625	10.0		G or SC	1/5 YR
111-44-4	Bis 2-Chloroethyl Ether	(4)	(5)		G or SC	1/5 YR
39638-32-9	Bis 2-Chloroisopropyl Ether	(4)	(5)		G or SC	1/5 YR
85-68-7	Butyl benzyl phthalate	625	10.0		G or SC	1/5 YR
91-58-7	2-Chloronaphthalene	(4)	(5)		G or SC	1/5 YR
218-01-9	Chrysene	625	10.0		G or SC	1/5 YR
53-70-3	Dibenz(a,h)anthracene	625	20.0		G or SC	1/5 YR

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
84-74-2	Dibutyl phthalate (synonym = Di-n-Butyl Phthalate)	625	10.0		G or SC	1/5 YR
95-50-1	1,2-Dichlorobenzene	624	10.0		G or SC	1/5 YR
541-73-1	1,3-Dichlorobenzene	624	10.0		G or SC	1/5 YR
106-46-7	1,4-Dichlorobenzene	624	10.0		G or SC	1/5 YR
91-94-1	3,3-Dichlorobenzidine	(4)	(5)		G or SC	1/5 YR
84-66-2	Diethyl phthalate	625	10.0		G or SC	1/5 YR
117-81-7	Di-2-Ethylhexyl Phthalate	625	10.0		G or SC	1/5 YR
131-11-3	Dimethyl phthalate	(4)	(5)		G or SC	1/5 YR
121-14-2	2,4-Dinitrotoluene	625	10.0		G or SC	1/5 YR
122-66-7	1,2-Diphenylhydrazine	(4)	(5)		G or SC	1/5 YR
206-44-0	Fluoranthene	625	10.0		G or SC	1/5 YR
86-73-7	Fluorene	625	10.0		G or SC	1/5 YR
118-74-1	Hexachlorobenzene	(4)	(5)		G or SC	1/5 YR
87-68-3	Hexachlorobutadiene	(4)	(5)		G or SC	1/5 YR
77-47-4	Hexachlorocyclopentadiene	(4)	(5)		G or SC	1/5 YR
67-72-1	Hexachloroethane	(4)	(5)		G or SC	1/5 YR
193-39-5	Indeno(1,2,3-cd)pyrene	625	20.0		G or SC	1/5 YR
78-59-1	Isophorone	625	10.0		G or SC	1/5 YR
98-95-3	Nitrobenzene	625	10.0		G or SC	1/5 YR
62-75-9	N-Nitrosodimethylamine	(4)	(5)		G or SC	1/5 YR
621-64-7	N-Nitrosodi-n-propylamine	(4)	(5)		G or SC	1/5 YR
86-30-6	N-Nitrosodiphenylamine	(4)	(5)		G or SC	1/5 YR
129-00-0	Pyrene	625	10.0		G or SC	1/5 YR
120-82-1	1,2,4-Trichlorobenzene	625	10.0		G or SC	1/5 YR
	VOLATILES					
107-02-8	Acrolein	(4)	(5)		G	1/5 YR
107-13-1	Acrylonitrile	(4)	(5)		G	1/5 YR
71-43-2	Benzene	624	10.0		G	1/5 YR
75-25-2	Bromoform	624	10.0		G	1/5 YR
56-23-5	Carbon Tetrachloride	624	10.0		G	1/5 YR
108-90-7	Chlorobenzene (synonym = monochlorobenzene)	624	50.0		G	1/5 YR
124-48-1	Chlorodibromomethane	624	10.0		G	1/5 YR

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
67-66-3	Chloroform	624	10.0		G	1/5 YR
75-09-2	Dichloromethane (synonym = methylene chloride)	624	20.0		G	1/5 YR
75-27-4	Dichlorobromomethane	624	10.0		G	1/5 YR
107-06-2	1,2-Dichloroethane	624	10.0		G	1/5 YR
75-35-4	1,1-Dichloroethylene	624	10.0		G	1/5 YR
156-60-5	1,2-trans-dichloroethylene	(4)	(5)		G	1/5 YR
78-87-5	1,2-Dichloropropane	(4)	(5)		G	1/5 YR
542-75-6	1,3-Dichloropropene	(4)	(5)		G	1/5 YR
100-41-4	Ethylbenzene	624	10.0		G	1/5 YR
74-83-9	Methyl Bromide	(4)	(5)		G	1/5 YR
79-34-5	1,1,2,2-Tetrachloroethane	(4)	(5)		G	1/5 YR
127-18-4	Tetrachloroethylene	624	10.0		G	1/5 YR
10-88-3	Toluene	624	10.0		G	1/5 YR
79-00-5	1,1,2-Trichloroethane	(4)	(5)		G	1/5 YR
79-01-6	Trichloroethylene	624	10.0		G	1/5 YR
75-01-4	Vinyl Chloride	624	10.0		G	1/5 YR
	RADIONUCLIDES					
	Strontium 90 (pCi/L)	(4)	(5)		G or C	1/5 YR
	Tritium (pCi/L)	(4)	(5)		G or C	1/5 YR
	Beta Particle & Photon Activity (mrem/yr)	(4)	(5)		G or C	1/5 YR
	Gross Alpha Particle Activity (pCi/L)	(4)	(5)		G or C	1/5 YR
	ACID EXTRACTABLES [6]					
95-57-8	2-Chlorophenol	625	10.0		G or SC	1/5 YR
120-83-2	2,4 Dichlorophenol	625	10.0		G or SC	1/5 YR
105-67-9	2,4 Dimethylphenol	625	10.0		G or SC	1/5 YR
51-28-5	2,4-Dinitrophenol	(4)	(5)		G or SC	1/5 YR
534-52-1	2-Methyl-4,6-Dinitrophenol	(4)	(5)		G or SC	1/5 YR
87-86-5	Pentachlorophenol	625	50.0		G or SC	1/5 YR
108-95-2	Phenol	625	10.0		G or SC	1/5 YR
88-06-2	2,4,6-Trichlorophenol	625	10.0		G or SC	1/5 YR

CASRN#	CHEMICAL	EPA ANALYSIS NO.	QUANTIFICATION LEVEL[1]	REPORTING RESULTS	SAMPLE TYPE[2]	SAMPLE FREQUENCY
MISCELLANEOUS						
	Ammonia as NH3-N	350.1	200		C	1/5 YR
16887-00-6	Chlorides	(4)	(5)		C	1/5 YR
7782-50-5	Chlorine, Total Residual	(4)	100		G	1/5 YR
57-12-5	Cyanide, Total	(4)	10.0		G	1/5 YR
N/A	*E. coli* / *Enterococcus* (N/CML)	(4)	(5)		G	1/5 YR
7783-06-4	Hydrogen Sulfide	(4)	(5)		G or SC	1/5 YR
60-10-5	Tributyltin [7]	NBSR 85-3295	(5)		G or C	1/5 YR

Name of Principal Exec. Officer or Authorized Agent/Title

Signature of Principal Officer or Authorized Agent/Date

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. See 18 U.S.C. Sec. 1001 and 33 U.S.C. Sec. 1319. (Penalties under these statutes may include fines up to $10,000 and or maximum imprisonment of between 6 months and 5 years.)

FOOTNOTES:

(1) Quantification level (QL) is defined as the lowest concentration used for the calibration of a measurement system when the calibration is in accordance with the procedures published for the required method.

The quantification levels indicated for the metals are actually Specific Target Values developed for this permit. The Specific Target Value is the approximate value that may initiate a wasteload allocation analysis. Target values are not wasteload allocations or effluent limitations. The Specific Target Values are subject to change based on additional information such as hardness data, receiving stream flow, and design flows.

Units for the quantification level are micrograms/liter unless otherwise specified.

Quality control and quality assurance information shall be submitted to document that the required quantification level has been attained.

(2) Sample Type

G = Grab = An individual sample collected in less than 15 minutes. Substances specified with "grab" sample type shall only be collected as grabs. The permittee may analyze multiple grabs and report the average results provided that the individual grab results are also reported. For grab metals samples, the individual samples shall be filtered and preserved immediately upon collection.

C = Composite = A 24-hour composite unless otherwise specified. The composite shall be a combination of individual samples, taken proportional to flow, obtained at hourly or smaller time intervals. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period.

SC = Special Composite = samples for base/neutral/acid compounds, PCBs, and pesticides must be collected as 4 individual grab samples taken proportional to flow at 6-hour intervals over the course of one day. The individual samples may be of equal volume for flows that do not vary by +/- 10 percent over a 24-hour period. Grab samples must be analyzed separately and the concentrations averaged. Alternately, grab samples may be collected in the field and composited in the laboratory if the compositing procedure produces results equivalent to results produced

by arithmetic averaging of the results of analysis of individual grab samples.

(3) A specific analytical method is not specified; however a target value for each metal has been established. An appropriate method to meet the target value shall be selected from the following list of EPA methods (or any approved method presented in 40 CFR Part 136). If the test result is less than the method QL, a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Metal	Analytical Method
Antimony	1638; 1639
Arsenic	206.5; 1632
Chromium[(9)]	1639
Cadmium	1637; 1638; 1639; 1640
Chromium VI	218.6; 1639
Copper	1638; 1640
Lead	1637; 1638; 1640
Mercury	245.7; 1631
Nickel	1638; 1639; 1640
Selenium	1638; 1639
Silver	1638
Zinc	1638; 1639

(4) Any approved method presented in 40 CFR Part 136.

(5) The QL is at the discretion of the permittee. For any substances addressed in 40 CFR Part 136, the permittee shall use one of the approved methods in 40 CFR Part 136.

(6) Testing for phenol requires continuous extraction.

(7) Analytical Methods: NBSR 85-3295 or DEQ's approved analysis for Tributyltin may also be used [See A Manual for the Analysis of Butyltins in Environmental Systems by the Virginia Institute of Marine Science, dated November 1996].

(8) Both Chromium III and Chromium VI may be measured by the total chromium analysis. If the result of the total chromium analysis is less than or equal to the lesser of the Chromium III or Chromium VI method QL, the results for both Chromium III and Chromium VI can be reported as "<[QL]", where the actual analytical test QL is substituted for [QL].

(9) The lab may use SW846 Method 8270D provided the lab has an Initial Demonstration of Capability, has passed a PT for Kepone, and meets the acceptance criteria for Kepone as given in Method 8270D